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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/597,102	06/20/2000	Christopher Graham Raphael Parsons	MERZ30 / dln	6038

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EXAMINER
COTTON, ABIGAIL MANDA

ART UNIT	PAPER NUMBER
1617	

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/597,102	PARSONS ET AL.	
	Examiner	Art Unit	
	Abigail M. Cotton	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 15-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 15-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/2/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office action is in response to the arguments submitted on February 2, 2006. Claims 1-13 and 15-17 are pending in the application and are examined on the merits herein.

Applicant's arguments regarding the rejection of the claims under 35 U.S.C. 103(a) over the prior art been fully considered but they are not persuasive. Accordingly, the rejection is being maintained.

The claims are rejected as follows.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gold et al. (WO 99/01416, of record) in view of Lucot ("Effects of N-

methyl-D-aspartate antagonists on different measures of motion sickness in cats," of record.)

Gold et al. discloses that the instant 1-aminoalkylcycohexane compounds are NMDA receptor antagonists, and they are known in combination with one or more pharmaceutically-acceptable diluents, excipients, or carriers, to be useful in a pharmaceutical composition and method for treating, eliminating, and alleviating CNS disorders (see abstract and page 3, lines 17-20, in particular) or a method of treating a living animal (including a human) for alleviation of a condition which is alleviated by an NMDA receptor antagonist (see claims 12 and page 29, lines 24 to page 30, line 12, in particular), and other diseases (see page 46 line 20, in particular, See also abstract, pages 4-8, 10-20 and claims 1-34 of Gold et al.

Note that Gold et al. discloses the effective amount of the compound herein in the range of 20 mg to 100 mg/day or 10 mg to 250 mg/day, or 1-1000 mg/day or 50-500 mg/day (see page 29, lines 18-22 and page 30, lines 5-6, in particular), which are within or the same as the effective amounts of 1-1000 mg/day or 1-500 mg/day, indicated in Applicant's specification (see page 22, the last four line of the specification.) Thus, Gold et al. teaches providing the compound and formulations of claims 1-13 and 15-17.

Further note that the recitation "a condition which is alleviated by a 5HT3 or neural nicotinic receptor antagonist" in the claim is considered to be merely a

mechanism of the action of the treatment as discussed in the prior interview. Note it has been held that a mechanism of action of a treatment would not by itself carry patentable weight if the prior art teaches the same or nearly the same method steps. Thus, Applicant's recitation of a new mechanism of action for the prior art method will not, by itself, distinguish the instant claims over the prior art teaching the same or nearly the same method steps.

Gold et al. does not expressly disclose the employment of the NMDA receptor antagonist, the same active compounds of the formula herein, in a method of treating of the particular disorder or condition such as emesis (also known as vomiting), cerebellar tremor, appetite disorder or irritable bowel syndrome in a living mammal.

Lucot teaches that "because N-methyl-D-aspartate (NMDA) antagonists prevent cisplatin-induced emesis and NMDA receptors are in both emetic pathways and structures associated with the final common pathway for vomiting, they have the potential to be broad-spectrum antiemetics" (see abstract, in particular.) The efficacy and potency of NMDA receptors were evaluated by determining their effects on motion sickness in cats according to Lucot (see Figure 1 and "Results" at page 408, in particular.) The measures included the number vomiting, the number of symptom points, which reflect activity early in the final common path, and the duration of the retch/vomit sequence, which reflects activity late in the path. The results are consistent with a broad spectrum of antiemetic efficacy with at least part of its action in the early to

middle portion of the final common pathway for vomiting (see also Figure 2 and "Discussion" at page 409, in particular.)

Thus, it is well-known in the art that an NMDA receptor antagonist is useful in treating a specific condition, emesis or vomiting, and that an NMDA receptor antagonist has a broad spectrum of antiemetic efficacy according to Lucot.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the NMDA receptor antagonists of Gold et al, the same active compounds of the formula herein, in a method of treating the particular condition, emesis.

One having ordinary skill in the art at the time the invention was made would have been motivated to employ the NMDA receptor antagonists of Gold et al, the same active compounds of the formula herein, in a method of treating the particular condition, emesis, since the same active compounds herein are known NMDA receptor antagonists and thus are known to be useful in a method of treating a living animal for alleviation of a condition which is alleviated by an NMDA receptor antagonist according, to Gold et al. In particular, it is well known in the art that an NMDA receptor antagonist is useful in treating emesis, according to Lucot. An NMDA receptor antagonist is known to possess a broad spectrum of antiemetic efficacy or actions.

Therefore, one of ordinary skill in the art would have reasonably expected that the same active compounds of the formula herein being the NMDA receptor antagonists, would have the same or substantially same beneficially therapeutic effects and usefulness in a method of treating emesis in a living animal, by administering the same effective amounts of the same compound of Gold et al.

Thus, the claimed invention as a whole is clearly prima facie obvious over the combined teachings of the prior art.

Response to Arguments

Applicant's arguments submitted February 2, 2006, regarding the rejection of the claims under 35 U.S.C. 103(a) over the prior art been fully considered but they are not persuasive.

In particular, Applicants argue that a reference cited by Lucot, namely Lehman et al, teaches that NMDA receptor antagonist may afford protection against cisplatin-induced emesis, but the specificity of this effect is uncertain and thus it would be uncertain to one of ordinary skill in the art whether NMDA receptor antagonists would provide broad-spectrum anti-emetic activity. The Examiner respectfully notes that the rejection of the claims is being made over the teachings of the Lucot reference itself, and not over the teachings of the Lehman et al. reference. Furthermore, the Examiner notes that Lehman et al's teachings that the antagonist may provide broad spectrum

anti-emetic activity would serve as further motivation to one of ordinary skill in the art to provide such antagonists as an antiemetic, as Lucot appears to have been motivated to do.

Applicants also assert that the Lucot reference teaches that one of the NMDA receptor antagonists tested produced a dose-dependent trend toward a decrease in symptoms that failed to achieve statistical significance, and that another NMDA receptor antagonist produce a decrease in symptoms that was not dose-dependent, and that also failed to achieve statistical significance, and thus Applicants assert that the data in Lucot does not support a conclusion that one of ordinary skill in the art would recognize the NMDA receptor antagonists as possessing broad spectrum anti-emetic activity.

The Examiner notes that this assertion by Applicants is in direct contradiction with the conclusions and results of the study as described by Lucot. In particular, Lucot states that "the major findings of the present study are that competitive and noncompetitive antagonists of NMDA receptors are effective in preventing motion sickness in the cat" (see first full paragraph of "Discussion," in particular), and concludes that "in summary, competitive and noncompetitive NMDA antagonists are now shown in a second species to be effective in preventing emesis elicited by provocative motion," adding that "the absence of obvious motor abnormalities at effective doses after LY 233053 suggests that competitive antagonists may have clinical use as antiemetics" (see final full paragraph of "Discussion," in particular.) Thus, Lucot clearly teaches that

NDMA antagonists exhibit antiemetic activity, particularly with regards to motion sickness.

Conclusion

No claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abigail M. Cotton whose telephone number is (571) 272-8779. The examiner can normally be reached on 9:30-6:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMC

SREENI PADMANABHAN
SUPERVISORY PATENT EXAMINER